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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,832	01/18/2002	Kazuhiko Ono	VX022408	1347

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EXAMINER

JOHNSON, JONATHAN J

ART UNIT PAPER NUMBER

1725

DATE MAILED: 07/02/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,832

Applicant(s)

ONO ET AL.

Examiner

Jonathan Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5-5-03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 1-22-01. It is noted, however, that applicant has not filed a certified copy of the Japanese application # 2001-013270 as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Offer (5,714,735). With respect to Claim 6, Offer teaches a laser welding method for supplying a filler wire to a welding object portion while projecting laser beam to said welding object portion (Figure 3b, Item 26d and 26e), wherein said filler wire is supplied obliquely from forward or backward in a welding advance direction such that an angle between the supplying direction and beam axis of said laser beam 2 is less than 45.degree (Column 8, lines 30-55).

With respect to Claim 7, the teachings of Offer are the same as relied upon in the rejection of Claim 6. Offer teaches a laser welding method wherein said filler wire is supplied

from backward of said laser beam with respect to the welding advance direction (Figure 3b, item 26d or 26e).

With respect to Claim 8, the teachings of Offer are the same as relied upon in the rejection of Claim 6. Offer teaches a the laser beam is a focused laser beam (Column 10, Lines 19-30).

With respect to Claim 9, the teachings of Offer are the same as relied upon in the rejection of Claim 6. Offer teaches the laser beam is supplied in a directly substantially perpendicular to a welding advance direction (Figure 4, Item 4).

With respect to Claim 10, the teachings of Offer are the same as relied upon in the rejection of Claim 7. Offer teaches a laser welding method for supplying a filler wire to a welding object portion while projecting laser beam to said welding object portion (Figure 3b, Item 26d and 26e), wherein said laser beam is weaved in a direction substantially perpendicular to the welding advance direction (Figure 4, Item 4). wherein said filler wire is supplied obliquely from forward or backward in a welding advance direction such that an angle between the supplying direction and beam axis of said laser beam 2 is less than 45.degree (Column 8, lines 30-55).

With respect to Claim 11, the teachings of Offer are the same as relied upon in the rejection of Claim 10. Offer teaches a laser welding method wherein said filler wire is supplied

from backward of said laser beam with respect to the welding advance direction (Figure 3b, item 26d or 26e).

With respect to Claim 12, the teachings of Offer are the same as relied upon in the rejection of Claim 10. Offer teaches a laser welding method wherein $V_w/F \cdot \sin \theta \geq 2D$ is established when an angle between said beam axis L and a supplying direction of the filler wire 4 is θ , the diameter of key hole is D, supplying speed of said filler wire is V_w and weaving frequency f said laser beam 2 is F (Figure 4, item 4).

Response to Arguments

Applicant argues that the claim limitation of “welding the welding object by immediate physical irradiation” requires the laser beam to be directly applied to the welding object without passing through an optical fiber (Paper #6, page 5). The examiner disagrees. During examination, the claims must be interpreted as broadly as their terms reasonably allow. This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). In the instant case, Offer teaches the use of a laser beam directly on the workpiece (Figure 4, Item 4). The examiner interprets this teaching of Offer to meet the claim language of the instant case.

Similarly, applicant argues that Offer does not teach the claim limitation “[t]he weaving of a laser beam in the presently claimed invention is achieved by rotating or swinging mirrors” (Paper #6, page 5). When giving the claim its broadest reasonable interpretation, it is the

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examiner's position that the weaving of the laser beam can be met through Offer's teaching of laying multiple weld beads on the workpiece (Figure 4, Item 4). That is, Offer teaches a laser apparatus that reciprocally moves along the direction of the weld bead (Figure 4, item 4 and Column 8, Lines 54-67). Since the laser beam's direction is always substantially perpendicular to the weld bead, the laser beam's direction is also always substantially perpendicular to the welding advance direction (see Figure 4, laser).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the beam to be directly applied to the welding object without passing through an optical fiber) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., weaving the laser beam in the presently claimed invention is achieved by rotating or swinging mirrors) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 703-308-0667. The examiner can normally be reached on M-Th 7AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

jj
June 24, 2003


M. ALEXANDRA ELVE
PRIMARY EXAMINER